

Solving systems of equations using elimination/combination 11.2

Go over graphing.

$$3x+2y=-13$$

$$3x+4y=1$$

Go over substitution.

See above

Use elimination.

$$3x+2y=-13$$

$$3x+4y=1$$

What do they have in common? Do you think we can cancel out?

We subtract the bottom equation from the top equation so we now have

$-2y=-14$ divide both sides by negative 2. we get $y=7$. Then we can plug that y in and solve for x into either of the two equations

$$3x+2(7)=-13$$

$$3x+14=-13 \text{ Subtract 14 from both sides}$$

$$3x=-27 \text{ divide each side by 2\3}$$

$$x=-9 \text{ so our solution is } (-9,7)$$

you try

$$3x+7y=14$$

$$2x+7y=21$$

As a class

$$4x+9y=-19$$

$$-4x-7y=13$$

You try

$$7x-5y=-24$$

$$-9x+5y=18$$

As a class

$$3x-4y=-4$$

$$6x-5y=-2$$

You try

$$2x+4y=8$$

$$4x-3y=5$$

HW: Kutasoftware worksheet on elimination

